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ABSTRACT

Fifty-seven references to documents received and processed to date by ERIC/CEF concerned with cost implications of educational facilities at the elementary and secondary levels are included in this interpretive bibliography. The references are classified according to content within the following categories--(1) Economies in School Construction, (2) School Bond Elections, (3) Renovating and Remodeling, (4) Construction Programs in Specific Areas, (5) Design Methodologies and Construction Procedures, (6) Urban School Construction, and (7) Federal and State Aid. Each reference is indexed and abstracted and the procurement source for each document is supplied. (NT)

ED035268

CLEARINGHOUSE ON
EDUCATIONAL
FACILITIES

ERIC CEF

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COST FACTORS IN THE PLANNING, DESIGN, FINANCING,
AND CONSTRUCTION OF ELEMENTARY AND SECONDARY
EDUCATIONAL FACILITIES

An Interpretive Bibliography

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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EF 004 087

COST FACTORS IN THE PLANNING, DESIGN, FINANCING,
AND CONSTRUCTION OF ELEMENTARY AND SECONDARY
EDUCATIONAL FACILITIES

Prepared By

Norman P. Isler

Subject Area Coordinator

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ERIC Clearinghouse on Educational Facilities

The University of Wisconsin

Madison, Wisconsin

February, 1970

COST FACTORS IN THE PLANNING, DESIGN, FINANCING, AND CONSTRUCTION
OF ELEMENTARY AND SECONDARY EDUCATIONAL FACILITIES

	<u>Pages</u>
Economies in School Construction	2-15
Comprising this first section are fourteen references to documents which specifically deal with effecting economies in school building construction. Design, flexibility, prefabrication, construction methods, and contracting are included in the various references as they pertain to the cutting of costs.	
School Bond Elections	17-27
School bond elections and the marketing of bonds once the borrowing has been approved by the electorate are the subjects of the eleven references. Included are discussions of bond election promotion techniques, legal implications, and interest rates.	
Renovating and Remodeling	29-32
The cost implications of renovating and/or remodeling school plants as opposed to the construction of new facilities are discussed in these four references. One document refers in particular to the refurbishing of non-educational buildings for use as schools.	
Construction Programs in Specific Areas	34-38
Cost considerations in school construction programs have been reported from various areas in the U.S. and Canada. Included here are reports from Mississippi, Kentucky, Delaware, and Alberta, concerned with the financing of school construction in those areas.	
Design Methodologies and Construction Procedures	40-49
Various design methodologies and construction procedures having a direct bearing on costs are the subjects of ten references. Critical Path Method, Component Building Systems, and a campus plan for an elementary school are among those reported upon.	
Urban School Construction	51-53
The problem of school construction in urban areas and its effect on costs is discussed through cost models and systems analysis.	

Pages

Federal and State Aid

55-64

Ten references which deal with federal aid and state aid toward construction of educational facilities are presented.

FOREWORD

The Educational Resources Information Center - Clearinghouse on Educational Facilities (ERIC/CEF) is a clearinghouse for information about sites, buildings, and equipment used for educational purposes. ERIC/CEF is part of a national network of 19 clearinghouses, each covering a different field of educational research. Information from all these clearinghouses is reported monthly in Research in Education (RIE), a publication of the U.S. Government Printing Office (annual subscription: domestic \$21.00, foreign \$26.25).

Since January, 1968 approximately 1,100 documents have been submitted by ERIC/CEF for inclusion in RIE. In addition, approximately 3,700 documents have been accumulated in a local collection which serves more specialized interests. While the clearinghouse collection does include textbooks, dissertations, and journal articles, the prime mission of ERIC/CEF is to locate and report on documents that are not well known nor widely distributed.

In performing subject searches in RIE, researchers should correlated its use with the Thesaurus of ERIC Descriptors. Descriptors are technically meaningful terms or short phrases that are used to characterize a document and which may also be used as index entries. The descriptors used to generate this particular bibliography were:

Accounting	Financial Needs
Bond Issues	Financial Policy
Budgeting	Financial Problems
Capital Outlay (For Fixed Assets)	Financial Services
Construction Costs	Financial Support
Contracts	Insurance Programs
Cost Effectiveness	Interest
Costs	Money Management
Credit (Finance)	School District Spending
Economic Factors	School Finance
Educational Finance	State Aid
Federal Aid	State Federal Support

All documents in the ERIC/CEF collection, which had been indexed using one or more of the aforementioned descriptors, were initial candidates for the bibliography. These documents were screened for applicability and quality and then organized into sections according to content.

The references contained herein do not represent an exhaustive compilation of publications on the subject. However, many of the documents are not widely circulated; and the bibliography serves to disseminate this information.

February, 1970

Howard E. Wakefield
Director

HOW TO OBTAIN DOCUMENTS

Information regarding the procurement of documents cited in this bibliography is provided at the bottom of each page. The documents are obtainable in either of two ways:

- (1) If the document has been reported in RIE, reproductions may usually be purchased from EDRS (ERIC Document Reproduction Service) either on microfiche or hard copy. The ERIC identification number for the document (ED number) is provided along with the prices -- MF for microfiche and HC for hard copy. When ordering from EDRS, the following information should be provided:

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ECONOMIES IN SCHOOL CONSTRUCTION

ERIC/CEP DOCUMENT NO. EFO00190

DISPOSITION-CERS 3

ECONOMIES IN SCHOOL CONSTRUCTION

INTERSTATE SCHOOL BUILDING SERVICE, NASHVILLE, TENNESSEE

PUBLISHED- 62

047 PAGES

DESCRIPTORS- *EDUCATIONAL PLANNING, *CONSTRUCTION COSTS, *SCHOOL CONSTRUCTION, SCHOOL PLANNING, SCHOOL LOCATION, SCHOOL DESIGN, BUILDING DESIGN, EDUCATIONAL FINANCE

THE PURPOSE OF THIS BULLETIN IS TO ASSIST DECISION-MAKERS IN THE DECISIONS AND CHOICES WHICH MUST BE MADE AND WHICH INFLUENCE THE COST OF A BUILDING PROJECT.

Availability;

Interstate School Building Service
George Peabody College for Teachers
Nashville, Tennessee

ERIC/CEP DOCUMENT NO. EF000212

DISPOSITION-CERS 3

258 WAYS TO SAVE MONEY IN PLANNING AND CONSTRUCTION SCHOOLS
BUILDINGS

BY- BULES, HAROLD W.
WESTERN MICHIGAN UNIVERSITY, KALAMAZOO, SCHOOL OF GRADUATE STUDIES

PUBLISHED- 63
IN- SERIES VII, NO. 1

026 PAGES

DESCRIPTORS- *COSTS, *CONSTRUCTION COSTS, *SCHOOL PLANNING,
PLANNING

THIS BOOKLET PRESENTS A COMPREHENSIVE LIST OF ECONOMY FACTORS, MOST OF WHICH ARE UNIVERSALLY APPLICABLE. THESE FACTORS WERE DETERMINED BY QUESTIONNAIRES PERTAINING TO 86 SCHOOL PLANTS CONSTRUCTED IN 1955.

Availability;

Campus Stores
Western Michigan University
Kalamazoo, Michigan

ERIC/CEP DOCUMENT NO. EF000402 ED 15616 DISPOSITION-EDC- 1

STRUCTURAL CONSIDERATIONS IN SCHOOL BUILDING ECONOMY

CONNECTICUT STATE DEPARTMENT OF EDUCATION, HARTFORD

PUBLISHED-JUN63

IN- SCHOOL BUILDING ECONOMY SERIES NO. 5

033 PAGES

DESCRIPTORS- *ARCHITECTURAL ELEMENTS, *CONSTRUCTION COSTS, *CONSTRUCTION NEEDS, *SCHOOL CONSTRUCTION, BUILDING DESIGN, BUILDING EQUIPMENT, PREFABRICATION, SCHOOL ARCHITECTURE, SCHOOL BUILDINGS

ALL SCHOOL BUILDINGS ARE BASICALLY SHELTER STRUCTURES. THEIR ELEMENTARY COMPONENTS ARE (1) STRUCTURAL MEMBERS, (2) WEATHER PROTECTION ELEMENTS, (3) MECHANICAL INSTALLATIONS, (4) FINISHING ELEMENTS, AND (5) BUILT-IN EQUIPMENT. THE CHOICE OF BUILDING SYSTEMS IS DEPENDENT ON (1) SUBSOIL CONDITIONS, (2) SITE CONTOURS, AND (3) CLIMATIC CONDITIONS. SEVERAL STRUCTURAL SYSTEMS ARE ANALYZED IN TERMS OF THESE CRITERIA. WEATHER PROTECTION ELEMENTS SUCH AS (1) ROOFING, (2) FLASHING, (3) SIDING, (4) WATERPROOFING, (5) INSULATION, (6) OVERHANGS AND SUNSHADES, (7) CIRCULATION CHARACTERISTICS, (8) AIR AND LIGHT PASSAGE, (9) ACOUSTICAL CORRECTION, AND (10) AESTHETIC IMPROVEMENT ARE DISCUSSED IN TERMS OF SCHOOL CONSTRUCTION. THE ASPECTS OF FIRE-RESISTIVITY MENTIONED ARE (1) SAFETY, (2) BUILDING RATING, AND (3) LOCAL ORDINANCES. MISCELLANEOUS ARCHITECTURAL CONSIDERATIONS ARE LISTED ALONG WITH RECOMMENDATIONS FOR THE ADOPTION OF A MODULAR SYSTEM OF DIMENSIONS. (MH)

Order from EDRS as: ED 15616

MF \$0.25

HC \$1.75

ERIC/CEP DOCUMENT NO. EF000424 ED 14856 DISPOSITION-EDC- 1

TOWARDS AN ECONOMICAL FLEXIBILITY

BY- RICHARDSON, L. S. AND CAUDILL, WILLIAM W.
CAUDILL, ROWLETT, SCOTT AND ASSOCIATES ARCHITECTS-ENGINEERS
BRYAN, TEXAS

IN- RESEARCH REPORT, 3

010 PAGES

DESCRIPTORS- *AUDITORIUMS, *CONSTRUCTION COSTS, *FLEXIBLE
FACILITIES, *SCHOOL EXPANSION, *SPACE DIVIDERS, BUILDING DESIGN,
CLASSROOM DESIGN, SCHOOL PLANNING

AN ARCHITECT AND A SUPERINTENDENT OF SCHOOLS COLLABORATED ON THE DESIGN FOR A HIGH SCHOOL, WHICH STRESSED ECONOMY AND FLEXIBILITY. THEY CONSIDERED THREE ASPECTS OF FLEXIBILITY--(1) EXPANDABILITY, (2) CONVERTIBILITY, AND (3) VERSATILITY. EXPANDABILITY IS DISCUSSED IN TERMS OF SITE SELECTION AND PLANNING. CONVERTIBILITY FEATURES IDENTIFIED INCLUDE MOVABLE SPACE DIVIDERS, EITHER STORAGE UNITS OR TEACHING PANELS, WHICH COULD BE REARRANGED FOR DIFFERENT INSTRUCTION LAYOUTS. VERSATILITY IS INCLUDED IN THE AUDITORIUM DESIGN WHICH INCORPORATES THE BAND ROOM AND ASSEMBLY ROOM, AND USING FOLDING PARTITIONS, PERMITS A NUMBER OF STAGE AND SEATING CONFIGURATIONS. THE AUDITORIUM ALSO FEATURES A CIRCULAR DOMED CONSTRUCTION WHICH HAS ACOUSTIC, ECONOMIC, AND STRUCTURAL ADVANTAGES. SPECIFIC ATTENTION IS GIVEN TO (1) STORAGE LIGHTING, (2) AUDITORIUM SEATING, (3) DOORLESS CLASSROOMS, AND (4) UTILITIES FLEXIBILITY. (DM)

Order from EDRS as: ED 14856

MF \$0.25

HC \$0.60

COMPACT SCHOOL AND \$\$ SAVINGS

BY- BAIR, W. G.
AMERICAN SCHOOL BOARD JOURNAL, MILWAUKEE, WISCONSIN

PUBLISHED-MAY66
IN- AMERICAN SCHOOL BOARD JOURNAL, MAY 66, PP. 32-33

002 PAGES

DESCRIPTORS- *AIR CONDITIONING, *COSTS, *FUEL CONSUMPTION,
*HEATING, *TEMPERATURE

A REVIEW OF THE CRITERIA FOR CONSIDERING THE USE OF A TOTAL ENERGY SYSTEM WITHIN A SCHOOL BUILDING STATES THE WINDOWLESS, COMPACT SCHOOL OFFERS MORE EFFICIENT SPACE UTILIZATION WITH LESS AREA REQUIRED FOR GIVEN STUDENT POPULATION AND LOWER OPERATION COSTS. THE AUTHOR RECOMMENDS THAT THESE BUILDINGS BE WINDOWLESS TO REDUCE HEAT COSTS. HOWEVER, AT THE SAME TIME IT IS POINTED OUT THAT WINDOWLESS STRUCTURES REQUIRE INCREASED LIGHTING LEVELS, AIR CONDITIONING AND AIR TREATMENT. IT IS RECOMMENDED AT THIS POINT THAT SCHOOL PLANNERS SHOULD SEEK THE ADVICE OF A CONSULTANT ENGINEER TO ASSESS THE FEASIBILITY OF INSTALLING A TOTAL ENERGY UNIT. ANNUAL COSTS OF COMMERCIAL ENERGY SHOULD BE COMPARED WITH OPERATING AND MAINTENANCE OF THE TOTAL ENERGY SYSTEM. SHOULD THE PLANNERS FAVOR THE TOTAL ENERGY UNIT, THEY SHOULD ALSO CONSIDER THE PURCHASE OF BACK-UP UNITS TO OPERATE IN THE EVENT OF A POWER FAILURE OF THE PRIMARY UNIT. THIS ARTICLE APPEARED IN THE MAY, 1966 ISSUE OF AMERICAN SCHOOL BOARD JOURNAL. COPIES MAY BE OBTAINED FROM THE EDITOR, BRUCE PUBLISHING CO., 400 N. BROADWAY, MILWAUKEE, WISCONSIN 53211. (GM)

Availability:

Editor, Bruce Publishing Company
400 North Broadway
Milwaukee, Wisconsin 53211

A REVIEW OF STUDIES OF ECONOMIES IN SCHOOLHOUSE CONSTRUCTION

BY- DUHERTY, LEO D. AND WHEATLEY, ARTRELLE
STATE UNIVERSITY OF NEW YORK, ALBANY, NEW YORK

PUBLISHED-MAY60

030 PAGES

DESCRIPTORS- *CONSTRUCTION COSTS, *EDUCATIONAL FINANCE,
*EDUCATIONAL PLANNING, *SCHOOL CONSTRUCTION, *SCHOOL PLANNING,
COMPONENT BUILDING SYSTEMS, MAINTENANCE, PREFABRICATION, SCHOOL
DESIGN, SITE DEVELOPMENT, SCHOOL LOCATION, SCHOOL MAINTENANCE

ECONOMIES IN PLANNING AND DESIGNING BEGIN WITH THE WISE
CHOICE OF AN ARCHITECT. COMPLETE INFORMATION ON BUILDINGS NEEDS,
ENROLLMENT PROJECTIONS, AND PROGRAM MUST BE AVAILABLE. INCLUSION
OF MULTIPLE-USE ROOMS, MINIMAL PERIMETER WALLS, LOWERED CEILINGS,
MINIMAL WASTE SPACE, MINIMAL USE OF GLASS, AND USE OF STOCK PLAND
ARE CONCEPTS WHICH CAN EFFECT ECONOMIES. FURTHER ECONOMIES CAN BE
EFFECTED BY CAREFUL SITE SELECTION, DEVELOPMENT, AND UTILIZATION.
PREFABRICATED SCHOOLS AND MODULAR DESIGN ARE NEWER CONCEPTS
SUGGESTED AS EFFICIENT USES OF MATERIALS. LOW COST MAINTENANCE
CONSTRUCTION CAN SAVE MUCH MONEY. USE OF TEMPORARY BUILDINGS
SHOULD BE AVOIDED. CAREFUL FINANCING OF BUILDING PROJECTS WILL
HELP REDUCE COSTS ESPECIALLY IF PROPER TIMING IS INDORPORATED.
TIMING IS ESSENTIAL TO THE ENTIRE CONSTRUCTION PROGRAM. A
BIBLIOGRAPHY IS INCLUDED. (RH)

Order from EDRS as: ED 19814
MF \$0.25 HC \$1.60

25 SIGNIFICANT ECONOMIES IN NEW SCHOOL BUILDINGS

BY- BOLES, HAROLD W.

PUBLISHED-JAN64

IN- AMERICAN SCHOOL BOARD JOURNAL, JANUARY, 1964

002 PAGES

DESCRIPTORS- *CONSTRUCTION COSTS, *EDUCATIONAL FINANCE,
*FINANCIAL POLICY, *SCHOOL PLANNING, BUDGETING, BUDGETS,
CONTRACTS, EDUCATIONAL SPECIFICATIONS, EQUIPMENT, SCHOOL
BUILDINGS, SCHOOL DESIGN

A CHECKLIST OF WAYS TO ACHIEVE ECONOMY IN SCHOOL PLANT CONSTRUCTION.
SOME OF THE FACTORS TO BE CONSIDERED INCLUDE: (1) BIDS, (2) DRAWINGS
AND SPECIFICATIONS, (3) ELIMINATION OF AREAS, (4) SELECTION OF ARCHITECT,
(5) EQUIPMENT, AND (6) PLAN FOR MULTIUSE.

Availability:

Bruce Publishing Co.
400 N. Broadway
Milwaukee, Wisconsin

VIRGINIANS STAY WITH LOW-COST SCHOOL PLAN

PUBLISHED-JAN64

IN- NATIONS SCHOOLS, VOL. 73, NO. 1, JANUARY, 1964

003 PAGES

DESCRIPTORS- *BUILDING INNOVATION, *CONSTRUCTION COSTS, *SCHOOL
CONSTRUCTION

AT LEAST \$50,000 IS SAVED EVERY TIME A TWIN-CIRCLE SCHOOL IS BUILT IN PRINCE WILLIAM COUNTY, VIRGINIA. THE LOCH LOMOND SCHOOL IS COMPRISED OF TWO ROUND CLASSROOM BUILDINGS THAT ARE CONNECTED BY A 'CORRIDOR' LEADING TO CENTRAL COMMON USE AREAS.

Availability:

The Nation's Schools
1050 Merchandise Mart
Chicago, Illinois 60654

ERIC/CEP DOCUMENT NO. EF001047

DISPOSITION-CERS 3

SEVEN STEPS CUT SCHOOL BUILDING COSTS

PUBLISHED-JUN65

IN- NATIONS SCHOOLS, VOL. 75, NO. 6, JUNE, 1965

003 PAGES

DESCRIPTORS- *INSURANCE PROGRAMS, *SCHOOL CONSTRUCTION, SAFETY

A STRONG CONSTRUCTION SAFETY PROGRAM CAN SAVE THOUSANDS OF DOLLARS FOR A SCHOOL DISTRICT ENGAGED IN A BUILDING PROGRAM. THE LESS INSURANCE MONEY THE CONTRACTOR MUST FIGURE INTO HIS PAYROLL, THE LOWER HE CAN BID.

Availability:

The Nation's Schools
1050 Merchandise Mart
Chicago, Illinois 60654

ERIC/CEP DOCUMENT NO. EF001930 ED 22350 DISPOSITION-EDC- 1

DESIGNING THE SCHOOL PLANT FOR ECONOMY (SCHOOL BUILDING ECONOMY
SERIES-NO. 4)

CONNECTICUT STATE DEPARTMENT OF EDUCATION, HARTFORD

PUBLISHED-JUN61

171 PAGES

DESCRIPTORS- SIGN NEEDS, SPACE UTILIZATION

TOPICS OF ECONOMICAL DESIGNING AND PLANNING ARE EXAMINED IN BOTH GENERAL AND SPECIFIC TERMS. DIAGRAMS AND PHOTOGRAPHS ILLUSTRATE GENERAL CONDITIONS AND PRINCIPLES WHILE THE TEXT OUTLINES CRITERIA AND PROVIDES SPECIFIC SUGGESTIONS. SUBJECTS COVERED INCLUDE--(1)BUILDING DESIGN FUNDAMENTALS, (2)COST COMPARISONS, (3)EFFICIENT DESIGN, (4)BASIC PLAN SCHEMES, (5)ENVIRONMENTAL CONTROL FACTORS, (6)ELEMENT PLANNING, (7)SITE ACCOMMODATION, (8)EXPANSION FACILITATION, (9)TREND DEVELOPMENT, AND (10)STATE AND LOCAL CODES. A BIBLIOGRAPHY IS INCLUDED.(MH)

Order from EDRS as: ED 22350

MF \$0.25

HC \$0.15

ECONOMIES FROM A TO Z IN PLANNING AND BUILDING SCHOOLS. ECONOMY HANDBOOK

NEW YORK STATE COMMISSION ON SCHOOL BUILDINGS, ALBANY

PUBLISHED-NOV53

AVAILABLE FROM- NEW YORK STATE COMMISSION ON SCHOOL BUILDINGS, ALBANY, N. Y.

051 PAGES

DESCRIPTORS- *CAPITAL OUTLAY (FOR FIXED ASSETS), *CHECK LISTS, *CONSTRUCTION COSTS, *ECONOMIC FACTORS, *SCHOOL CONSTRUCTION, CONSTRUCTION PROGRAMS, EDUCATIONAL FINANCE, FACILITY EXPANSION, SCHOOL PLANNING, SITE SELECTION

PRESENTED IN THIS HANDBOOK ARE GENERAL DESCRIPTIONS AND CHECK LISTS OF ECONOMIES PERTAINING TO THE FOLLOWING ASPECTS OF SCHOOLHOUSE CONSTRUCTION--(1) SELECTING THE ARCHITECT, (2) SITE SELECTION, (3) EDUCATIONAL AND ARCHITECTURAL PLANNING, (4) CONSTRUCTION DETAILS, AND (5) CONTRACTING THE WORK. THE ECONOMIES ARE INTENDED FOR IMPLEMENTATION IN A WISE AND CAREFULLY MANAGED EXPENDITURE OF SCHOOL FUNDS IN PROVIDING FACILITIES WHICH ARE ADEQUATE IN TERMS OF THE NEEDS OF THE EDUCATIONAL PROGRAM AT THE MOST REASONABLE COST. PICTURES AND DRAWINGS SUPPLEMENT THE DESCRIPTIONS. (FS) //

Availability:

New York State Commission on
School Buildings
Albany, New York

HOW PARMA BUILT A SPACE-AGE SCHOOL AND SAVED A MILLION DOLLARS

PUBLISHED-SEP62

IN- NATIONS SCHOOLS, V 70 N 3 P 102-106,108 SEP 1962

AVAILABLE FROM- MCGRAW-HILL PUBLICATIONS, CIRCULATION DEPT., 1050
MERCHANDISE MART, CHICAGO, ILLINOIS 60654

007 PAGES

DESCRIPTORS- *ARCHITECTURAL MATERIALS, *BUILDING DESIGN,
*CONSTRUCTION COSTS, *ECONOMIC FACTORS, *FLEXIBLE FACILITIES,
EDUCATIONAL COMPLEXES, FACILITY REQUIREMENTS, MULTIPURPOSE
CLASSROOMS, SCHOOL CONSTRUCTION, SCHOOL PLANNING

A DESCRIPTION IS GIVEN OF THE COST CUTTING FEATURES, WHICH
WERE IMPLEMENTED IN THE DESIGN AND CONSTRUCTION OF A HIGH SCHOOL
IN PARMA HEIGHTS, OHIO. CONSIDERATION IS GIVEN TO SAVINGS
EFFECTED THROUGH FUNCTIONAL DESIGN, PROVIDING FOR THE MULTIPLE
USE OF MANY AREAS, AND BY THE USE OF LARGE QUANTITIES OF STANDARD
MATERIALS, WITH A CORRESPONDING REDUCTION IN THE AMOUNT OF CUSTOM
AND SPECIAL MATERIALS UTILIZED. IT IS EMPHASIZED THAT THE
ECONOMIES WERE REALIZED WITHOUT CUTTING THE QUALITY OF THE
EDUCATIONAL PROGRAM. INCLUDED ARE PHOTOGRAPHS, WHICH EXEMPLIFY
THE COST SAVING FEATURES. (FS) //

Availability:

McGraw-Hill Publications
Circulation Department
1050 Merchandise Mart
Chicago, Illinois 60654

NORTHVILLE BUILDS ELEMENTARY SCHOOL FOR \$7.00 PER SQUARE FOOT
CONSTRUCTION COST. ST. PAUL LUTHERAN CHURCH CEMENTS SOME SAVING

PUBLISHED-MAR60

IN- MICHIGAN ASSOCIATION OF SCHOOL BOARDS JOURNAL, P 11-12 MAR
1960

AVAILABLE FROM- MICHIGAN ASSOCIATION OF SCHOOL BOARDS, 450
ERICKSON HALL, MICHIGAN STATE UNIVERSITY EAST LANSING, MICHIGAN
48823

002 PAGES

DESCRIPTORS- *ARCHITECTURAL ELEMENTS, *BUILDING DESIGN,
*CONSTRUCTION COSTS, *ELEMENTARY SCHOOLS, *FACILITY GUIDELINES,
ARCHITECTURAL PROGRAMING, FACILITY EXPANSION, FACILITY
REQUIREMENTS, SCHOOL ARCHITECTURE

VARIOUS COST-CUTTING PROCEDURES, WHICH WERE IMPLEMENTED IN
THE CONSTRUCTION OF THE NORTHVILLE, MICHIGAN ELEMENTARY SCHOOL,
ARE DESCRIBED. CONSIDERATION IS GIVEN TO FACILITY AND EQUIPMENT
DESIGN FEATURES TOWARD WHICH ECONOMIZING EFFORTS WERE DIRECTED.
PHOTOGRAPHS, OF SOME OF THE DESIGN FEATURES REFERRED TO, ARE
INCLUDED. (FS)//

Availability;

Michigan Association of School Boards
450 Erickson Hall
Michigan State University
East Lansing, Michigan

ERIC/CEF DOCUMENT NO. EF000227

DISPOSITION-CERS 3

LONG RANGE PLANNING AND EDUCATIONAL SPECIFICATIONS FOR SCHOOL
BUILDING ECONOMY

CONNECTICUT STATE DEPT. OF EDUCATION, HARTFORD

PUBLISHED- 62
IN- SCHOOL BUILDING ECONOMY SERIES, NO. 2

040 PAGES

DESCRIPTORS- *COSTS, *PLANNING, *STUDENT DISTRIBUTION, *STUDENT
ENROLLMENT, *STUDENT TEACHER RATIO, CLASS SIZE, ESTIMATED COSTS,
EDUCATIONAL PLANNING, SCHOOL PLANNING

IT IS THE PURPOSE OF THIS BOOKLET TO HELP LOCAL SCHOOL BOARDS TOWARD A
FULLER UNDERSTANDING OF THE BENEFITS OF PLANNING AND THE TECHNIQUES FOUND
MOST EFFECTIVE.

Availability

Connecticut State Dept. of Education
Hartford, Connecticut

SCHOOL BOND ELECTIONS

ERIC/CEF DOCUMENT NO. EF000480 ED 14863 DISPOSITION-CERS 1

BOND ISSUE WHAT SHALL WE DO (TECHNIQUES USED IN PROMOTING SCHOOL BOND ELECTIONS)

TEXAS EDUCATION AGENCY, AUSTIN, TEXAS

PUBLISHED-MAR66

091 PAGES

DESCRIPTORS- *BOND ISSUES, *EDUCATIONAL FINANCE, *FINANCIAL SUPPORT, *PUBLIC RELATIONS, *PUBLIC SUPPORT, SCHOOL SUPPORT

THIS REPORT OUTLINES SUGGESTIONS FOR CONDUCTING SCHOOL BOND CAMPAIGNS. ONE OF THE FIRST STEPS AN ADMINISTRATOR SHOULD TAKE IS TO EVALUATE THE FACTORS IMPORTANT TO THE SELLING OF BONDS--STIMULATE INTEREST IN INVESTMENT DEALERS THEREBY INCREASING COMPETITION FOR BONDS, PREPARE A COMPLETE ACCURATE PROSPECTUS, CIRCULATE THE PROSPECTUS AMONG BOND DEALERS, ANSWER ALL INQUIRIES PROMPTLY AND ACCURATELY, IF NOT RATED, INVESTIGATE THE POSSIBILITY OF BECOMING RATED. ANOTHER PRE-CAMPAIGN MEASURE IS TO ESTABLISH LINES OF COMMUNICATION FOR DISSEMINATING INFORMATION TO THE PUBLIC. MASS MEDIA, PUBLIC SPEAKERS, AND CITIZENS COMMITTEES UTILIZING GRAPHS, CHARTS, ETC. MAY BE USED TO CARRY THE CAMPAIGN TO THE PUBLIC. A PUBLIC RELATIONS PROGRAM IS SUGGESTED AS A MEANS FOR STIMULATING COMMUNITY ACTION. SAMPLES OF SPEECHES, BROCHURES, GRAPHS, BLUEPRINTS, FINANCIAL REPORTS AND OTHER CAMPAIGN MATERIALS ARE CITED IN THE REPORT. (GM)

Order from EDRS as: ED 14863

MF \$0.50

HC \$4.65

DEVELOPING PRACTICES CONCERNING GENERAL OBLIGATION SCHOOL BONDS
AND CAPITAL OUTLAY FINANCING

BY- SHOCKLEY, EMMETT
ASSOCIATION OF SCHOOL BUSINESS OFFICIALS, CHICAGO, ILLINOIS

PUBLISHED- 65
IN- PROCEEDINGS, ASSOCIATION OF SCHOOL BUSINESS OFFICIALS OF THE
UNITED STATES AND CANADA, 50TH ANNUAL MEETING AND EDUCATIONAL
EXHIBIT, SAN FRANCISCO, CALIFORNIA, OCTOBER 17-22, 1964

013 PAGES

DESCRIPTORS- *FEDERAL AID, *FINANCIAL NEEDS, *FINANCIAL SUPPORT,
*STATE AID, *EDUCATIONAL FINANCE, SCHOOL SUPPORT

THIS REPORT PRESENTS THE HISTORY AND EVOLUTION OF GENERAL OBLIGATION SCHOOL BONDS AND CAPITAL OUTLAY FINANCING FOR PUBLIC EDUCATION. THE HISTORY ENTAILS PAST LEGISLATION OF SEVERAL STATES CONCERNED WITH SCHOOL BORROWING. THE EVOLUTION OF SCHOOL BONDING IS EXPLAINED IN TERMS OF INCREASED SCHOOL FINANCING FROM 1900 THROUGH 1958. SINCE 1958 A LEVELING TREND IN SCHOOL BORROWING IS NOTED. THE SCHOOL BUILDING AUTHORITY, FEDERAL AID AND STATE CAPITAL OUTLAY ASSISTANCE ARE CITED AS MAJOR CAUSES FOR THE PLATEAU IN SCHOOL BORROWING. THE ISSUANCE OF BUILDING AUTHORITY BONDS CONTINUES TO SHOW THE MOST EXPANSION. STATE BONDS HAVE NOT SHOWN THE SAME RATE OF EXPANSION.

Availability:

ASBO Secretary
2424 W. Lawrence Ave.
Chicago, Illinois 60625

FINANCING SCHOOL CONSTRUCTION

BY- DAUM, HENRY F.
ASSOCIATION OF SCHOOL BUSINESS OFFICIALS, EVANSTON, ILLINOIS

PUBLISHED-OCT61
IN- PROCEEDINGS, ASSOCIATION OF SCHOOL BUSINESS OFFICIALS OF THE
UNITED STATES AND CANADA, 47TH ANNUAL MEETING AND EXHIBIT,
TORONTO, ONTARIO, CANADA, OCTOBER 7-12, 1961

006 PAGES

DESCRIPTORS- * BOND ISSUES, *EDUCATIONAL FINANCE, *SCHOOL
CONSTRUCTION, CONSTRUCTION COSTS, BUDGETING, BUDGETS, FINANCIAL
NEEDS, FINANCIAL POLICY, FINANCIAL PROBLEMS, PLANNING, SCHOOL
PLANNING

A DISCUSSION OF AUTHORITY FINANCING AS IT IS PRACTICED IN PENNSYLVANIA.
AN AUTHORITY IS A SPECIAL CORPORATION CHARTERED BY THE STATE LEGISLATURE
WHICH IS EMPOWERED TO BORROW MONEY AND TO BUILD SCHOOL BUILDINGS FOR
LOCAL DISTRICTS AND THEN RENT THEM TO THE DISTRICTS FOR A RENT SUFFICIENT
TO PAY OFF INTEREST AND PRINCIPAL.

Availability:

ASBO Sectetary
2424 W. Lawrence Ave.
Chicago, Illinois 60625

EXPERTS SURVEY FINANCING SCHOOL-BUILDING PROGRAMS

BY- JARVIS, OSCAR T.

PUBLISHED-JAN64

IN- AMERICAN SCHOOL BOARD JOURNAL, JANUARY, 1964

002 PAGES

DESCRIPTORS- *BOND ISSUES, *CAPITAL OUTLAY (FOR FIXED ASSETS) ,
*SCHOOL FINANCE, BUDGETING, FISCAL CAPACITY , STATE AID

SEVERAL METHODS OF FINANCING THE SCHOOL BUILDING PROGRAM ARE DISCUSSED.
(1) THE BONDING PLAN, (2) PAY AS YOU GO, AND (3) THE COMBINATION PLAN.
AN OUTLINE OF THE STATE'S RESPONSIBILITY FOR SCHOOL BUILDING FINANCING IS
PROVIDED.

Availability;

The American School Board Journal
Bruce Publishing Co.
400 N. Broadway
Milwaukee, Wisconsin

LEGAL PROBLEMS RELATED TO MARKETING OF SCHOOL BONDS

**BY- GALLOWAY, ARCHIBALD N.
ASSOCIATION OF SCHOOL BUSINESS OFFICIALS, EVANSTON, ILLINOIS**

**PUBLISHED- 59
IN- PROCEEDINGS, ASSOCIATION OF SCHOOL BUSINESS OFFICIALS OF THE
UNITED STATES AND CANADA, 44TH ANNUAL CONVENTION, NEW YORK, N.
Y., OCTOBER 5-9, 1958**

009 PAGES

**DESCRIPTORS- * BOND ISSUES, *EDUCATIONAL FINANCE, *LEGAL
PROBLEMS, *MONEY MANAGEMENT, EDUCATIONAL POLICY, LEGAL AID, LEGAL
COSTS, MANAGEMENT, MUNICIPALITIES**

**A "BIRD'S EYE" VIEW OF PROBLEMS INVOLVED AND THE WARNING SIGNS THAT MUST
BE OBSERVED. AMONG THE PROBLEMS DISCUSSED ARE: DEBT LIMIT, PURPOSE OF THE
ISSUE, REFERENDUM, MAXIMUM LIFE OF ISSUE, AMOUNTS OF ANNUAL MATURITIES,
SALE OF BONDS, AND REQUIREMENTS FOR FURNISHING FINANCIAL INFORMATION.**

Availability;

**ASBO Secretary
2424 W. Lawrence Ave.
Chicago, Illinois 60625**

FINANCIAL PROBLEMS RELATED TO MARKETING OF SCHOOL BONDS

**BY- WHITBECK, JOHN
ASSOCIATION OF SCHOOL BUSINESS OFFICIALS, EVANSTON, ILLINOIS**

**PUBLISHED- 59
IN- PROCEEDINGS, ASSOCIATION OF SCHOOL BUSINESS OFFICIALS OF THE
UNITED STATES AND CANADA, 44TH ANNUAL CONVENTION, NEW YORK, N.
Y., OCTOBER 5-9, 1958**

011 PAGES

**DESCRIPTORS- *BOND ISSUES, *EDUCATIONAL FINANCE, *FINANCIAL
POLICY, *FINANCIAL PROBLEMS, *MONEY, ADMINISTRATION, MANAGEMENT,
SCHOOL ADMINISTRATION**

**A DISCUSSION OF STEPS A SCHOOL DISTRICT MAY TAKE WHICH SHOULD HELP TO HAVE A
SUCCESSFUL SALE AT LOWEST POSSIBLE INTEREST COST.**

Availability:

**ASBO Secretary
2424 W. Lawrence Ave.
Chicago, Illinois 60625**

MICHIGAN SCHOOL BOND LOAN PROGRAM

MICHIGAN STATE DEPT. OF EDUCATION, LANSING

PUBLISHED- 66

14 PAGES

DESCRIPTORS- *BOND ISSUES, *EDUCATIONAL FINANCE, *FINANCIAL SERVICES, *SCHOOL DISTRICTS, *STATE PROGRAMS, STATE DEPARTMENTS OF EDUCATION, STATE LAWS, STATE LEGISLATION

AN ACTUAL STATEMENT OF LEGISLATION PERTAINING TO SCHOOL BONDS IN MICHIGAN.

Availability:

**Michigan State Department of Education
Lansing, Michigan**

GARDEN CITY REPORTS SUCCESSFUL BOND AND SCHOOL MILLAGE ELECTIONS

BY- O'LEARY E.J.

PUBLISHED-MAR64

IN- AMERICAN SCHOOL BOARD JOURNAL, P 17-18, MAR 1964

AVAILABLE FROM- THE AMERICAN SCHOOL BOARD JOURNAL, BRUCE PUB.
CO., 400 N. BROADWAY, MILWAUKEE, WISCONSIN 53201

VOTERS IN THIS MICHIGAN CITY APPROVED 18 SPECIAL SCHOOL PROPOSITIONS IN
11 YEARS AND TURNED DOWN MORE. SOME REASONS BEHIND THE SUCCESS ARE RELATED
IN THIS ARTICLE.

Availability:

Bruce Publishing Co.
400 W. Broadway
Milwaukee, Wisconsin 53201

ERIC/CEP DOCUMENT NO. EF002469

DISPOSITION-CERS 2

THE COST OF BORROWING MONEY

PUBLISHED-JUL65

003 PAGES

DESCRIPTORS- *ADMINISTRATOR GUIDES, *CONSTRUCTION COSTS,
*CREDIT(FINANCE), *SCHOOL DISTRICTS, *SCHOOL DISTRICT SPENDING,
EDUCATIONAL FINANCE, INTEREST

A DISCUSSION OF THE EFFECT OF INTEREST RATES ON SCHOOL
CONSTRUCTION COSTS. AFTER REVIEWING THE VARIABLES WHICH DETERMINE
INTEREST COSTS THE AUTHOR SUGGESTS THE ONE FACTOR THE SCHOOL
ADMINISTRATOR CAN BEST CONTROL IS HIS DISTRICT'S CREDIT
RATING.(FPO)

Availability:

School Management Magazine Inc.
22 West Putnam Ave.
Greenwich, Connecticut 06830

FIFTEEN FINE YEARS OF SCHOOL CONSTRUCTION PROGRESS, 1950-1965

MILWAUKEE PUBLIC SCHOOLS, WISCONSIN

PUBLISHED- 66

066 PAGES

DESCRIPTORS- *CONSTRUCTION PROGRAMS, *FACILITY EXPANSION,
*FACILITY REQUIREMENTS, *FINANCIAL SUPPORT, *SCHOOL CONSTRUCTION,
BOND ISSUES, BUDGETS, SCHOOL DISTRICTS, SCHOOL TAXES, SITE
SELECTION

A PROGRESS REPORT REVIEWING THE MILWAUKEE SCHOOL BOARDS
CONTINUOUS PROGRAM OF ACQUIRING SITES AND BUILDING SCHOOLS. AN
ITEMIZED LISTING OF 140 COMPLETED CONSTRUCTION PROJECTS IS
SUPPLEMENTED WITH PERTINENT FACTS AND FIGURES. THESE INCLUDE
DATA CONCERNED WITH--(1) GROWTH FACTORS AFFECTING SCHOOL BUILDING
NEEDS, (2) RESULTANT INCREASES IN THE PHYSICAL PLANT, STAFF AND
BUDGET, (3) RESEARCH ACTIVITIES OF THE STAFF AND THE BOARD, (4)
THE ROLES OF THE CONSTRUCTION AND THE REPAIR DIVISIONS, AND (5)
THE PROGRAM FOR SCHOOL MODERNIZATION. ATTENTION IS ALSO GIVEN TO
BASIC POLICIES RELATING TO SITE SELECTION, SCHOOL CONSTRUCTION
AND DISTRICTING. A SECTION DEALING WITH THE FINANCIAL ASPECTS OF
THE BUILDING PROGRAM SUMMARIZES FOUR SCHOOL BOND REFERENDUM
ELECTIONS AND DISCLOSES THE REVENUES RECEIVED ANNUALLY THROUGH
THE CONSTRUCTION FUND LEVY. (FS)

Availability:

Milwaukee Public Schools
5225 W. Vilet St.
Milwaukee, Wisconsin 53208

BCND SALES FOR PUBLIC SCHOOL PURPOSES 1967-68

BY- BARR, RICHARD H.
U.S. DEPT OF HEALTH, EDUCATION AND WELFARE, OFFICE OF EDUCATION,
WASHINGTON, D.C.

PUBLISHED-JAN69

OC8 PAGES

DESCRIPTORS- *BOND ISSUES, *EDUCATIONAL FINANCE, *ELECTIONS,
*INTEREST, *PUBLIC SCHOOLS, COSTS, STATISTICAL DATA

INFORMATION IS PROVIDED CONCERNING THE SALE OF BONDS FOR
CONSTRUCTION OF PUBLIC ELEMENTARY AND SECONDARY SCHOOL
FACILITIES. IT IS INTENDED FOR USE BY ADMINISTRATORS, BOARD
MEMBERS, AND THE GENERAL PUBLIC WHO MUST REPAY THESE BONDS AND
HENCE MUST HAVE SOME KNOWLEDGE OF THEIR FINANCING. A GENERAL
DESCRIPTION OF THE CHARACTERISTICS OF PUBLIC SCHOOL PRIMARY
MARKET BOND SALES DURING THE FISCAL YEAR 1968 (JULY 1, 1967-JUNE
30, 1968) IS GIVEN. SPECIFIC INFORMATION IS ALSO PROVIDED
REGARDING NEW BOND SALES, BOND ELECTIONS FOR PUBLIC SCHOOL
PURPOSES, AND NET INTEREST COSTS. (NI) //

Availability:

Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402 \$0.10

RENOVATING AND REMODELING

MODERNIZATION OF SCHOOL BUILDINGS

BY- L HOTE, JOHN
NATIONAL COUNCIL ON SCHOOLHOUSE CONSTRUCTION, EAST LANSING,
MICHIGAN

PUBLISHED-OCT63
IN- PROCEEDINGS OF THE NCSC 40TH ANNUAL MEETING, PRINCETON, NEW
JERSEY, OCTOBER 7-10, 1963

005 PAGES

DESCRIPTORS- *BUILDING IMPROVEMENT, *BUILDING OBSOLESCENCE,
*CONSTRUCTION COSTS, *EVALUATION METHODS, *SCHOOL CONSTRUCTION,
DECISION MAKING, EDUCATIONAL NEEDS, HEALTH, SAFETY, STATE LAWS,
STRUCTURAL BUILDING SYSTEMS

THE PROBLEM OF BUILDING MODERNIZATION VERSUS REPLACEMENT CANNOT YET BE SOLVED WITH FIXED FORMULAS OR GUIDELINES. THE DECISION PROCESS INVOLVES A COMBINATION OF MANY FACTORS INCLUDING COSTS, HEALTH, SAFETY, EDUCATIONAL ADEQUACY, STRUCTURAL SAFETY, ADMINISTRATIVE FEATURES, AND APPEARANCE. THESE ARE DETERMINED BY BOTH CITIZEN AND STAFF EVALUATION. THE BASIC DECISIONS ARE MADE ON--(1) STRUCTURAL SOUNDNESS, (2) THE NEED FOR THE FACILITY, (3) APPROPRIATENESS OF FACILITIES. ECONOMIC CONSIDERATIONS DETERMINE THE NEED FOR MODERNIZATION, WHICH CAN BE DONE EFFECTIVELY, WITHIN THIS GENERAL DECISION FRAMEWORK. DISCUSSION AND EXAMPLES ARE DRAWN FROM THE DETROIT SCHOOL SYSTEM.

Availability:

C.E.F.P. Executive Headquarters
29 West Woodruff Avenue
Columbus, Ohio 43210

ERIC/CEF DOCUMENT NO. EF001437 ED 18951 DISPOSITION-EDC- 1

MAJOR CONSIDERATIONS IN SCHOOL MODERNIZATION - AGE, LOCATION, EDUCATIONAL ADEQUACY

BY- LHOTE, JOHN D.

RESEARCH COUNCIL OF THE GREAT CITIES PROGRAM FOR SCHOOL IMPROVEMENT, CHICAGO, ILLINOIS

PUBLISHED-OCT67

IN- NEW LIFE FOR OLD SCHOOLS NEWSLETTER, NO. 22

004 PAGES

DESCRIPTORS- *BUILDING IMPROVEMENT, *CONSTRUCTION COSTS, *EDUCATIONAL NEEDS, *PHYSICAL DESIGN NEEDS, *SCHOOL CONSTRUCTION, BUILDING OBSOLESCENCE, EDUCATIONAL FACILITIES, EDUCATIONAL SPECIFICATIONS, FLEXIBLE FACILITIES, SCHOOL LOCATION

A DESCRIPTION OF THE RELATIONSHIP BETWEEN SCHOOL MODERNIZATION AND BUILDING AGE, WITH PARTICULAR ATTENTION TO RENOVATION RATHER THAN NEW CONSTRUCTION TO MEET CHANGING EDUCATIONAL NEEDS, IS GIVEN. THE NEWSLETTER EMPHASIZES EDUCATIONAL ADEQUACY AS BEING MORE IMPORTANT THAN BUILDING AGE, AND DESCRIBES RENOVATION TECHNIQUES WHICH WILL FACILITATE THIS APPROACH. A MAJOR CONSIDERATION IS IN TEACHING NEEDS AND EDUCATIONAL METHODS AS CRITERIA IN ADDITION TO LIGHTING AND CLIMATE CONTROL WHICH SERVE PHYSIOLOGICAL NEEDS. OTHER ITEMS INCLUDE DECISION MAKING PROCESSES, COSTS, FLEXIBILITY, AND TEACHER EDUCATION. CLARIFICATION OF THE TERM SCHOOL MODERNIZATION IS ALSO INCLUDED. (MM)

Order from EDRS as: ED 18951

MF \$0.25 HC \$0.30

WAREHOUSES, GARAGES, BOWLING ALLEYS - NON-EDUCATIONAL BUILDINGS
FIND NEW LIFE AS SCHOOLS

BY- GRAVES, BEN E.
RESEARCH COUNCIL OF THE GREAT CITIES PROGRAM FOR SCHOOL
IMPROVEMENT, CHICAGO, ILLINOIS

PUBLISHED-JAN68
IN- NEW LIFE FOR OLD SCHOOLS NEWSLETTER, NO. 24

4 PAGES

DESCRIPTORS- *BUILDING CONVERSION, *CONSTRUCTION COSTS, *SPACE
UTILIZATION, BUILDING OBSOLESCENCE, SCHOOL IMPROVEMENT

INCREASING SCHOOL POPULATIONS AND SITE COSTS ARE CAUSING
GREATER USE OF NON-EDUCATIONAL BUILDINGS. EXAMPLES CITED
INCLUDE--(1) THE USE OF CHURCHES FOR CERTAIN PRIMARY LEVELS, (2)
COMMERCIAL SPACE CONVERTED TO ADULT EDUCATION FACILITIES, (3) A
420,000 SQUARE FOOT FACTORY CONVERTED INTO A VOCATIONAL SCHOOL,
(4) A TELEPHONE COMPANY BUILDING CONVERTED INTO A VOCATIONAL
GUIDANCE CENTER, (5) A 660,000 SQUARE FOOT FACTORY CONVERTED INTO
A TRADE SCHOOL AND MANPOWER TRAINING CENTER, (6) A FOOD STORE
BUILDING CONVERTED INTO A VOCATIONAL HIGH SCHOOL, AND (7) A STUDY
CONDUCTED CONFIRMING THE FEASIBILITY OF MERGING COMMUNITY COLLEGE
FACILITIES WITH CULTURAL AND COMMERCIAL FACILITIES IN A DOWN TOWN
LOCATION. EACH EXAMPLE DEMONSTRATES THE ECONOMIC ADVANTAGES WITH
COST FIGURES. THE WINNING SUBMITTAL IN A COMPETITION TO CONVERT A
JUNIOR HIGH SCHOOL INTO AN INTERMEDIATE SCHOOL IS SHOWN IN FLOOR
PLAN AND PERSPECTIVE VIEWS. THE RENOVATION SCHEDULE WAS DESIGNED
TO MINIMIZE DISTURBANCE TO EXISTING OPERATIONS. (MH)////

Availability;

Research Council of the Great Cities
Program for School Improvement
4433 W. Touhy Ave.
Chicago, Illinois 60645

ERIC/CEP DOCUMENT NO. EFC01569 ED 18102 DISPOSITION-EDC- 1

RENOVATE AND MODERNIZE OR ABANDON AND BUILD (A SUMMARY OF AN ILLUSTRATED TALK GIVEN BY WILLIAM L. ENSIGN OF MC LEOD, FERRARA AND ENSIGN, ARCHITECTS, AT THE AASA CONVENTION IN ATLANTIC CITY, 1968)

RESEARCH COUNCIL OF THE GREAT CITIES PROGRAM FOR SCHOOL IMPROVEMENT, CHICAGO, ILLINOIS

PUBLISHED-MAR68

IN- NEW LIFE FOR OLD SCHOOLS NEWSLETTER, NO. 26, MARCH 1968

4 PAGES

DESCRIPTORS- *BUILDING IMPROVEMENT, *CONSTRUCTION COSTS, *DESIGN NEEDS, *EDUCATIONAL INNOVATION, *SCHOOL CONSTRUCTION, BUILDING INNOVATION, CONTROLLED ENVIRONMENT, EDUCATIONAL NEEDS, SAFETY

THIS NEWSLETTER COMPARES THE ADVANTAGES AND DISADVANTAGES OF SCHOOL RENOVATION AND NEW SCHOOL CONSTRUCTION WITH RESPECT TO EVOLVING EDUCATIONAL NEEDS AND METHODS. THE NEED TO UTILIZE EXISTING STRUCTURES THROUGH RENOVATION AND MODERNIZATION IS EMPHASIZED AND A FORMULA IS PROVIDED FOR COMPARING RENOVATION AND NEW SCHOOL CONSTRUCTION COSTS. PROBLEMS AND CONSIDERATIONS ARE GIVEN FOR MODERNIZATION. EXAMPLES ARE GIVEN OF SUCCESSFUL RENOVATION PROJECTS INCLUDING GYMNASIUMS, AUDITORIUMS, AND CLASSROOMS. NEW TEACHING INNOVATIONS ARE ALSO ILLUSTRATED.
(MM)////

Order from EDRS as: ED 18102

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CONSTRUCTION PROGRAMS IN SPECIFIC AREAS

ERIC/CEF DOCUMENT NO. EF000983

DISPOSITION-CERS 2

MISSISSIPPI'S 300 MILLION DOLLAR SCHOOL CONSTRUCTION PROGRAM

BY- NAYLOR, T. H. JR. AND CAIN, G. J.
MISSISSIPPI STATE EDUCATIONAL FINANCE COMMISSION, JACKSON

PUBLISHED-JUL65

026 PAGES

DESCRIPTORS- *COSTS, *IMPROVEMENTS, *PLANNING, CONSTRUCTION
COSTS, BUILDING IMPROVEMENT, PUBLIC SCHOOLS, SCHOOL PLANNING,
SCUTHERN SCHOOLS

THIS REPORT IS A REVIEW OF THE ASSISTANCE PROGRAM FROM 1946 TO THE PRESENT FOR LOCAL SCHOOL DISTRICTS IN MISSISSIPPI. SCHOOL DISTRICT PROGRAM NEEDS WERE DETERMINED BY A CITIZEN'S COUNCIL, A LEGISLATURE STUDY COMMITTEE, AN EDUCATIONAL FINANCE COMMITTEE AND A LEGISLATIVE REPORT IN PUBLIC EDUCATION. THESE GROUPS EXAMINED EXISTING SCHOOL PLANT FACILITIES AND MADE RECOMMENDATIONS IN TERMS OF PROJECTIONS OF FUTURE NEEDS. A TABLE OF ALLOCATIONS TO SCHOOL DISTRICTS AND A TABLE OF ANNUAL ALLOCATIONS ARE INCLUDED IN THE REPORT. A SUMMARY PRESENTS SITE SPECIFICATIONS, FACILITIES INCLUDED, THE REDUCTION OF THE NUMBER OF SCHOOL DISTRICTS, SCHOOL POPULATION GROWTH AND SCHOOL CONSTRUCTION COSTS.

Availability:

Mississippi State Educational Finance
Commission
Jackson, Mississippi

FINANCING SCHOOL BUILDING CONSTRUCTION

BY- ROBINSON, RAYMOND W. AND SPEIDEL, HAROLD O.
PENNSYLVANIA STATE DEPARTMENT OF PUBLIC INSTRUCTION, HARRISBURG

PUBLISHED- 64
IN- SCHOOL EXECUTIVE SERIES NO. 5

010 PAGES

DESCRIPTORS- *CONSTRUCTION COSTS, *EDUCATIONAL FINANCE,
*FINANCIAL NEEDS, *SCHOOL CONSTRUCTION, BOND ISSUES, CONSTRUCTION
NEEDS, FINANCIAL SUPPORT, MUNICIPALITIES, STATE AID, FINANCING

THIS PUBLICATION OUTLINES THE VARIOUS METHODS THAT MAY BE EMPLOYED BY PENNSYLVANIA SCHOOL DISTRICTS TO FINANCE BUILDING CONSTRUCTION. PAY-AS-YOU-GO IS CITED AS THE MOST ECONOMICAL WAY SINCE FUNDS COME FROM CURRENT TAX RECEIPTS, TEMPORARY LOANS ARE NEXT. SUCH LOANS ARE CONSIDERED TO BE FOR FIVE YEARS OR LESS. ISSUANCE OF GENERAL OBLIGATION BONDS IS ANOTHER COMMON METHOD OF FINANCING NEW CONSTRUCTION. STATUTORY LIMITATIONS PROVIDE CONTROLS WHICH MUST BE OBSERVED. THE MOST COMMON METHOD OF FINANCING CONSTRUCTION IS THROUGH USE OF A MUNICIPALITY AUTHORITY. THIS IS A SEPARATE CORPORATE ENTITY WHICH BUILDS THE BUILDING AND RENTS IT TO THE SCHOOL DISTRICT ON A LONG-TERM LEASE. THE STATE PUBLIC BUILDING AUTHORITY CAN DO THE SAME THING AS A MUNICIPALITY AUTHORITY. INTEREST RATES ARE OFTEN LOWER THROUGH SUCH A BODY. PROVISIONS ARE MADE FOR STATE REIMBURSEMENT ON APPROVED BUILDING PROJECTS.

Availability:

Pennsylvania State Department of
Public Instruction
Harrisburg, Pennsylvania

ERIC/CEP DOCUMENT NO. EF001815 ED 19845 DISPOSITION-EDC- 1

KENTUCKY PUBLIC SCHOOL CONSTRUCTION

BY- SPARKS, HARRY M.
KENTUCKY STATE DEPARTMENT OF EDUCATION, FRANKFORT

PUBLISHED- 67

163 PAGES

DESCRIPTORS- *SCHOOL ARCHITECTURE, *SCHOOL BUILDINGS, *SCHOOL CONSTRUCTION, *SCHOOL DISTRICT SPENDING, ELEMENTARY SCHOOLS, HIGH SCHOOLS, SCHOOL SUPPORT

NEW SCHOOL CONSTRUCTION IN THE STATE OF KENTUCKY IS ILLUSTRATED THROUGH REVIEW OF--(1) 15 ELEMENTARY SCHOOLS, (2) 14 HIGH SCHOOLS, AND (3) ONE ADMINISTRATIVE FACILITY. EACH EXAMPLE INCLUDES--(1) A GENERAL ARCHITECTURAL DESCRIPTION, (2) SITE AND FLOOR PLANS, AND (3) AN EXTERIOR PHOTOGRAPH OR PERSPECTIVE. PRECEDING THESE EXAMPLES ARE REVIEWS OF--(1) BONDS, SPECIAL LEVIES AND ASSESSMENTS OF STATE SCHOOL DISTRICTS, (2) BONDS OUTSTANDING AND SCHOOL REVENUE BONDS, AND (3) AREA AND COST DATA FOR SCHOOL CONSTRUCTION. COPIES MAY ALSO BE OBTAINED FROM THE DIRECTOR, DIVISION OF STATISTICAL SERVICES, STATE DEPARTMENT OF EDUCATION, FRANKFORT, KENTUCKY. (MH)

Order from EDRS as: ED 19845

MF \$0.75 HC \$8.25

A REPORT TO THE ASSOCIATION OF STATE DIRECTORS OF EDUCATIONAL
PLANT SERVICES ANNUAL MEETING IN DETROIT

PUBLISHED-OCT67

004 PAGES

DESCRIPTORS- *CONSTRUCTION COSTS, *CONSTRUCTION PROGRAMS,
*EDUCATIONAL FINANCE, *EDUCATIONAL IMPROVEMENT, *SCHOOL
CONSTRUCTION, CAPITAL OUTLAY (FOR FIXED ASSETS), FACILITY
EXPANSION, FINANCIAL POLICY, FINANCIAL SUPPORT

A DESCRIPTION IS PRESENTED OF CHANGES EFFECTED IN SCHOOL
BUILDING PROCEDURES IN DELAWARE. UPDATING OF PROCEDURES AND
FUNDING OF CONSTRUCTION PROGRAMS IN THE FOLLOWING AREAS ARE
DESCRIBED--(1) LEGISLATION, (2) NEW PROGRAMS, (3) REPORTS, (4)
THE BUILDING PROGRAM, (5) BOARD POLICY AND (6) EDUCATIONAL
TELEVISION. INCLUDED IS A BREAK-DOWN OF FUNDS INVOLVED IN THE
ANNUAL CAPITAL IMPROVEMENT ACT FOR FISCAL 1968. (FS)

Availability:

State Department of Education
Dover, Delaware

ERIC/CEF DOCUMENT NO. EF003212

DISPOSITION-CERS 2

SCHOOL BUILDING IN ALBERTA

BY- HALL, L. G.

PUBLISHED-MAR67

IN- CANADIAN EDUCATION AND RESEARCH DIGEST, V7 N1 P59-66 MARCH 1967

AVAILABLE FROM- CANADIAN EDUCATION AND RESEARCH DIGEST, CANADIAN EDUCATION ASSN., 151 BLOOR ST. W., TORONTO 5, ONTARIO, CANADA

006 PAGES

DESCRIPTORS- *AGENCY ROLE, *EDUCATIONAL ADMINISTRATION, *EDUCATIONAL FINANCE, *FACILITY REQUIREMENTS, *SCHOOL CONSTRUCTION, CONSTRUCTION COSTS, CONSTRUCTION PROGRAMS, FACILITY EXPANSION, FINANCIAL SUPPORT

AFTER POINTING OUT THE NEED FOR MORE SCHOOL BUILDINGS IN ALBERTA, CANADA, CONSIDERATION IS GIVEN TO THE ADMINISTRATIVE AND FINANCIAL BACKGROUND TO SCHOOL BUILDINGS. ROLES ARE DISCUSSED FOR PROVINCIAL ORGANIZATIONS INVOLVED IN BUILDING PROJECTS AND PLANNING, AND THE ROLE OF THE SCHOOL BUILDINGS BOARD IS DESCRIBED. (FS)

Availability:

Canadian Education and Research Digest
Canadian Education Association
151 Bloor St.
Toronto 5, Ontario Canada

DESIGN METHODOLOGIES AND CONSTRUCTION PRODEDURES

CRITICAL PATH METHODS IN CONSTRUCTION PRACTICE

BY- ANTILL, JAMES M. AND WOODHEAD, RONALD W.

PUBLISHED- 65

290 PAGES

DESCRIPTORS- *CONSTRUCTION COSTS, *PLANNING, *SCHOOL
CONSTRUCTION, *SYSTEMS ANALYSIS, *SYSTEMS APPROACH, SCHOOL
PLANNING

THE CRITICAL PATH METHOD IS APPLIED AS A TOOL FOR THE PLANNING AND MANAGEMENT OF DIFFERENT TYPES OF CONSTRUCTION PROJECTS. THIS METHOD CONSISTS OF A SCHEMATIC DIAGRAM OR MODEL THAT DEPICTS THE SEQUENCE AND INTERRELATION OF THE COMPONENT PARTS OF A PROJECT. A PLANNING APPROACH OF THIS TYPE PERMITS CONTINUAL EVALUATION AND COMPARISON OF ALTERNATIVE WORK PROGRAMS, CONSTRUCTION METHODS, AND TYPES OF EQUIPMENT THAT MAY BE USED. ONCE A PLAN HAS BEEN DEVISED AND CONSTRUCTION HAS STARTED, THE MODEL CAN PROVIDE INFORMATION ON THE EFFECTS OF CONSTRUCTION VARIATION OR DELAY AND PERMIT IDENTIFICATION OF CONSTRUCTION OPERATIONS REQUIRING ADJUSTMENTS. CRITERIA TO BE PUT INTO THE MODEL INCLUDE TIME-COST FACTORS, SCHEDULING, FLOAT TIMES AND PROJECT, RESOURCE AND COST CONTROLS. (GM)

Availability;

Wiley Publishing Co.
New York, New York

ERIC/CEP DOCUMENT NO. EF000426 ED 14857 DISPOSITION-EDC- 1

RELATIONSHIP OF COST TO THE GEOMETRY OF A BUILDING

BY- ROWLETT, JOHN M. AND BULLOCK, THOMAS A.
CAUDILL, ROWLETT, SCOTT AND ASSOCIATES ARCHITECTS-ENGINEERS
BRYAN, TEXAS

IN- RESEARCH REPORT, 5

006 PAGES

DESCRIPTORS- *BUILDING DESIGN, *CONSTRUCTION COSTS, *SCHOOL
DESIGN, ARCHITECTURE, BUILDINGS, DESIGN, SCHOOL BUILDINGS, SCHOOL
CONSTRUCTION

A SIMPLE BUILDING WITH A MINIMUM NUMBER OF INSIDE AND
OUTSIDE CORNERS GIVES THE MAXIMUM AMOUNT OF QUALITY TEACHING
SPACE FOR EACH BUILDING DOLLAR. THIS CONCLUSION IS BASED ON ONE
ARCHITECTURAL FIRM'S COMPARISON OF TWO SIMILAR SCHOOLS, ONE OF
WHICH HAD A MORE COMPLEX PLAN. A COMPARISON OF COSTS, AREAS
PERIMETERS, VOLUMES, NUMBER OF CORNERS, AND NUMBER OF ROOFS IS
GIVEN. (JT)

Order from EDRS as: ED 14857

MF \$0.25

HC \$0.40

CURRENT TRENDS IN SCHOOL FACILITIES

SCHOOL MANAGEMENT INC., GREENWICH, CONNECTICUT

IN- ANNUAL SCHOOL BUILDING ISSUE, SCHOOL MANAGEMENT VOL 9 NO 7
JULY 1965 PP 108-141

034 PAGES

DESCRIPTORS- *CONSTRUCTION COSTS, *EQUIPMENT, *SCHOOL FACILITIES

THIS DOCUMENT PRESENTS GRAPHS AND CHARTS WHICH DEMONSTRATE CURRENT TRENDS IN THE COSTS, EQUIPMENT, AND MATERIALS IN THE CONSTRUCTION OF ELEMENTARY AND SECONDARY SCHOOLS FOR THE 1963, 1964 AND 1965 SCHOOL YEARS. BY SCHOOL SIZE AND STATE, THE DOCUMENT LISTS CLASSROOM COSTS, PER PUPIL COSTS AND THE SPECIALIZED FACILITIES WHICH ARE BEING PROVIDED IN AUDITORIUMS, CAFETERIAS, KITCHENS, GYMNASIUMS, LANGUAGE LABORATORIES, SCIENCE LABORATORIES, INDUSTRIAL ARTS, ART, HOME ECONOMICS, BUSINESS EDUCATION, LIBRARY, AND MUSIC. SPECIALIZED COSTS FOR EDUCATIONAL TELEVISION, AIR CONDITIONING, CARPETING, AND OPERABLE WALLS ARE INCLUDED.

Availability:

School Management Magazine Inc,
22 W. Putnam Ave.
Greenwich, Conn.

SCHOOL BUILDING PROJECT PROCEDURES (A GUIDE FOR THE SCHOOL
BUILDING COMMITTEE)

CONNECTICUT STATE DEPARTMENT OF EDUCATION, HARTFORD

PUBLISHED-JUN60

IN- SCHOOL BUILDING ECONOMY SERIES-*1

043 PAGES

DESCRIPTORS- *CONSTRUCTION COSTS, *CONTRACTS, *BUDGETING, *SCHOOL
BUILDINGS, *SCHOOL PLANNING

IN 1959 THE CONNECTICUT GENERAL ASSEMBLY PASSED LEGISLATION
REQUIRING THAT THE STATE DEPARTMENT OF EDUCATION ESTABLISH A
SCHOOL CONSTRUCTION SERVICE TO ASSIST COMMUNITIES IN ACHIEVING
INCREASED ECONOMY IN THEIR SCHOOL BUILDING PROJECTS. IT FURTHER
REQUIRES EACH PROJECT BE REVIEWED BY THE SERVICE FOR ECONOMY IN
ORDER TO QUALIFY FOR STATE CONSTRUCTION GRANT. THIS FIRST BOOKLET
RECOMMENDS PROCEDURES DESIGNED TO ELIMINATE WASTED EFFORT, LOST
TIME, AND THE RESULTANT, HIDDEN BUT CONSIDERABLE COST. IT IS A
MUST IN PROCEDURES WHICH COMMUNITIES SHOULD FOLLOW IF THEY WISH
TO OBTAIN FINANCIAL ASSISTANCE UNDER THE CONNECTICUT SCHOOL
BUILDING AID LAW. CHAPTERS ON SCHOOL BUILDING COMMITTEE,
ALLOCATION OF RESPONSIBILITIES, EDUCATIONAL SPECIFICATIONS
RECONSIDERED, SELECTING AN ARCHITECT, TIME FOR PLANNING,
BUDGETING AND COST CONTROL, CONTRACT DOCUMENTS, BIDDING AND
CONSTRUCTING, AND CONSTRUCTION PERIOD, ARE SHORT, CONCISE, AND
USEFUL TO GROUPS AND OFFICIALS PLANNING SCHOOL FACILITIES. THE
OTHER FOUR CHAPTERS ARE APROPOS ONLY TO CONNECTICUT AND OTHER
STATE LAWS AND REGULATIONS.

Availability:

Connecticut State Department of Educ.
Hartford, Conn.

COMPONENTS FOR SCHOOL CONSTRUCTION IN THE MID-HUDSON
REGION,---FINAL REPORT 3

RENSSELAER POLYTECHNIC INSTITUTE, TROY, NEW YORK, CENTER FOR
ARCHITECTURAL RESEARCH

PUBLISHED-MAR66

027 PAGES

DESCRIPTORS- *BUILDING DESIGN, *CONSTRUCTION COSTS, *COSTS,
*SCHOOL CONSTRUCTION, *SCHOOL DESIGN, COMPONENT BUILDING SYSTEMS
, DESIGN

THE FINAL REPORT OF A THREE PART FEASIBILITY STUDY OF THE
COMPONENT CONSTRUCTION SYSTEMS SAMPLED APPROPRIATED ASPECTS OF
THE SCHOOL CONSTRUCTION CLIMATE IN NEW YORK STATE. IT SOUGHT TO
DETERMINE THE APPROPRIATENESS OF THE SCHOOL CONSTRUCTION SYSTEM
DEVELOPMENT PROCESS TO SCHOOL CONSTRUCTION IN THE MID-HUDSON
VALLEY AND TO EXPLORE POSSIBILITIES FOR THE ACCOMPLISHMENT OF
SUCH PROGRAMS. THIS COMPONENT APPROACH SEEKS TO ACHIEVE ECONOMIES
BY STANDARDIZING CERTAIN UNITS OF CONSTRUCTION AND EQUIPMENT AND
BY LARGE SCALE PURCHASING OF THESE COMPONENTS. THIS STUDY
CONTAINS A SUMMARY OF THE EIGHT 'CLIMATE AREAS' THAT WERE
INVESTIGATED AND CONCLUSIONS AS TO THE VARIOUS ASPECTS OF
FEASIBILITY. (BD)

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CONTRACT DOCUMENTS AND PERFORMANCE SPECIFICATIONS

FIRST CALIFORNIA COMMISSION ON SCHOOL CONSTRUCTION SYSTEMS, PALO ALTO

PUBLISHED-JUL63

269 PAGES

DESCRIPTORS- * COMPONENT BUILDING SYSTEMS, *CONSTRUCTION PROGRAMS, * CONTRACTS , *COSTS, *EDUCATIONAL SPECIFICATIONS, BUILDING DESIGN, CONSTRUCTION COSTS, SCHOOL CONSTRUCTION, SCHOOL PLANNING, SCHOOLS, STRUCTURAL BUILDING SYSTEMS

A SET OF EDUCATIONAL SPECIFICATIONS DRAFTED BY THE FIRST CALIFORNIA COMMISSION ON SCHOOL CONSTRUCTION SYSTEMS GIVES INFORMATION ON BIDDING PROCEDURES, A DESCRIPTION OF THE CURRENT CONSTRUCTION PROGRAM, PROCEDURES FOR SUBMITTING A PROPOSAL, DATA AND CONDITIONS RELATED TO THE DEVELOPMENT PHASE OF THE PROJECT, COMPONENT CONTRACTS, AND GENERAL CONDITIONS AND PROCEDURES. PERFORMANCE SPECIFICATIONS ARE OUTLINED IN TERMS OF STRUCTURE, HEATING, VENTILATION, COOLING, CEILING LIGHTING AND INTERIOR PARTITIONS. ALSO INCLUDED ARE MATERIALS--COST MATRICES, CONSTRUCTION TIMETABLES AND ADDENDA TO THE SPECIFICATIONS. (GM)

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HIGH SCHOOL SIZE AND COST FACTORS, FINAL REPORT

BY- KIESLING, HERBERT J.
INDIANA UNIVERSITY, BLOOMINGTON

PUBLISHED-MAR68

153 PAGES

DESCRIPTORS- *COST EFFECTIVENESS, *EXPENDITURE PER STUDENT,
*FACILITY GUIDELINES, *SCHOOL SIZE, *SECONDARY SCHOOLS,
ENROLLMENT INFLUENCES, FACILITY IMPROVEMENT, SOCIOECONOMIC
INFLUENCES, STANDARDS, STUDENT NEEDS

THE RELATIONSHIP OF PUBLIC HIGH SCHOOL PERFORMANCE TO
EXPENDITURE PER PUPIL AND HIGH SCHOOL SIZE WAS EXAMINED. DATA
FROM 775 PUBLIC HIGH SCHOOLS IN THE CONTINENTAL UNITED STATES
GENERATED BY THE AMERICAN INSTITUTE FOR RESEARCH (PROJECT TALENT)
WAS USED TO EVALUATE TWELVE POTENTIAL MEASURES OF HIGH SCHOOL
PERFORMANCE. NINE OF THESE MEASURES WERE EITHER ACHIEVEMENT TESTS
OR FACTOR SCORES BASED ON ALL TESTS. WHAT WERE JUDGED TO BE THE
MOST IMPORTANT OF THESE OUTPUT MEASURES WERE THEN RELATED TO HIGH
SCHOOL EXPENDITURE AND SIZE IN A SIMPLE MODEL OF THE EDUCATIONAL
PROCESS IN WHICH PERFORMANCE OF PUPILS FROM SIMILAR
SOCIO-ECONOMIC BACKGROUNDS WAS EXPLAINED BY A GENERAL
INTELLIGENCE FACTOR SCORE, SCHOOL EXPENDITURE, SCHOOL SIZE, AND
AN INDEX OF PUPIL SOCIO-ECONOMIC BACKGROUND. (RLP)

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METHODS OF BUILDING COST ANALYSIS

BUILDING RESEARCH INST. INC., WASHINGTON D.C.

PUBLISHED- 61

086 PAGES

**DESCRIPTORS- *ARCHITECTURAL PROGRAMING, *BUILDING DESIGN,
*CONSTRUCTION COSTS, COST EFFECTIVENESS, FACILITY INVENTORY,
LIGHTING**

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(2) THREE CASE STUDIES OF ANALYSIS TECHNIQUES, (3) PROCEDURES FOR
MEASURING THE AREA AND VOLUME OF BUILDINGS, AND (4) AN OPEN FORUM
DISCUSSION. CASE STUDIES EVALUATE--(1) THE THERMAL ECONOMICS OF
BUILDING ENCLOSURES, (2) AN ECONOMIC ANALYSIS OF INTEGRATED
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MORE THAN THREE VARIABLES. (MH)**

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DISPOSITION-CERS 2

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MILWAUKEE BOARD OF SCHOOL DIRECTORS, WISCONSIN

PUBLISHED-JAN65

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114 PAGES

DESCRIPTORS- *CONSTRUCTION COSTS, *CONSTRUCTION PROGRAMS,
*FACILITY EXPANSION, *FACILITY REQUIREMENTS, *SITE ANALYSIS,
CONSTRUCTION NEEDS, EDUCATIONAL FINANCE, SCHOOL CONSTRUCTION,
SCHOOL IMPROVEMENT, SCHOOL PLANNING

FIVE-YEAR SCHOOL BUILDING AND SITE NEEDS AND RELATED
FINANCIAL REQUIREMENTS ARE SUMMARIZED FOR MILWAUKEES SCHOOLS.
EDUCATIONAL POLICIES CONCERNING THE SCHOOL BUILDING PROGRAM ARE
STATED, AND CONSIDERATION IS GIVEN TO FACTORS AFFECTING SCHOOL
BOARD NEEDS SUCH AS BIRTH RATE, PUBLIC HOUSING PROJECTS, URBAN
RENEWAL, HIGHWAYS AND EXPRESSWAYS, ETC. SCHOOL FACILITIES AND
SITES NEEDED ARE SPECIFICALLY NOTED. A PROGRESS REPORT IS GIVEN
ON THE SCHOOL CONSTRUCTION AND IMPROVEMENT PROGRAM, AND INTERIM
REPORTS OF THE FIVE-YEAR BUILDING AND FUTURE SITES COMMISSION ARE
PRESENTED. (FS)

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THE CAMPUS PLAN. ONE ANSWER TO QUALITY ELEMENTARY EDUCATION IN SYRACUSE

SYRACUSE CITY SCHOOL DISTRICT, N.Y.

PUBLISHED- 68

017 PAGES

DESCRIPTORS- *CAMPUSES, *EDUCATIONAL COMPLEXES, *EDUCATIONAL FINANCE, *ELEMENTARY EDUCATION, *SCHOOL PLANNING, CAPITAL OUTLAY (FOR FIXED ASSETS), EDUCATIONAL PARKS, RACIAL BALANCE, SCHOOL BUILDINGS, SCHOOL DISTRICT SPENDING

ONE OF THREE RESEARCH REPORTS PUBLISHED ON THE CAMPUS PLAN FOR SYRACUSE ELEMENTARY SCHOOLS. THIS REPORT, AFTER EXPLAINING THE PLAN AND THE ADVANTAGES TO BE REALIZED FROM IT, IS CONCERNED WITH HOW MUCH THE PLAN WOULD COST. A SCHEDULE OF CAPITAL OUTLAYS FOR VARIOUS ALTERNATE PLANS, FOR BOTH THE CAMPUS PLAN AND SCATTERED-SITE SCHOOLS WITH VARIOUS FACILITY ARRANGEMENTS, IS PRESENTED. (FPO)//

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URBAN SCHOOL CONSTRUCTION

COST MODEL FOR LARGE URBAN SCHOOLS

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE, WASHINGTON, D.C.

**PUBLISHED- 67
IN- TECHNICAL NOTE, NO. 30**

026 PAGES

**DESCRIPTORS- *COSTS, *SCHOOL CONSTRUCTION, *URBAN EDUCATION,
CAPITAL, EQUIPMENT, EXPENDITURES, SCHOOL LOCATION, TRANSPORTATION**

THIS DOCUMENT CONTAINS A COST SUBMODEL OF AN URBAN EDUCATIONAL SYSTEM. THIS MODEL REQUIRES THAT PUPIL POPULATION AND PROPOSED SCHOOL BUILDING ARE KNOWN. THE COST ELEMENTS ARE--(1) CONSTRUCTION COSTS OF NEW PLANTS, (2) ACQUISITION AND DEVELOPMENT COSTS OF BUILDING SITES, (3) CURRENT OPERATING EXPENSES OF THE PROPOSED SCHOOL, (4) PUPIL TRANSPORTATION COSTS, (5) INSTRUCTIONAL EQUIPMENT COSTS, AND (6) DEBT SERVICE COSTS. VARIABLES CITED THAT DETERMINE CONSTRUCTION COSTS OF NEW SCHOOLS ARE ADMINISTRATION COSTS, SPACE PER PUPIL, TOTAL PUPILS, AND THE SQUARE FOOT COST. FROM EVIDENCE PRESENTED, THE ASSUMPTION THAT LARGER SCHOOL PLANTS COST LESS PER PUPIL CANNOT BE SUPPORTED. QUANTITY RATHER THAN QUALITY OF BUILDING WAS CONSIDERED. LAND COSTS ARE DETERMINED BY COST PER ACRE, LAND NEEDED FOR TYPE OF SCHOOL, LAND NEEDED PER PUPIL, AND TOTAL NUMBER OF PUPILS. CURRENT OPERATING COSTS ARE ESTIMATED FROM SALARY LEVEL AND NUMBER OF STAFF, EDUCATIONAL LEVEL AND NUMBER OF PUPILS, AND TEACHER-PUPIL RATIO. TRANSPORTATION EXPENSES ARE DETERMINED FROM EQUIPMENT COST, MAINTENANCE AND STORAGE COST, PUPILS TRANSPORTED, EFFECTIVE CAPACITY OF BUS PER MILE COST OF OPERATION, BUS SPEED, AND PUPIL COLLECTION TIME. INSTRUCTIONAL EQUIPMENT COSTS ARE DETERMINED FROM PURCHASE AND MAINTENANCE COSTS, AND NUMBER OF PUPILS USING EQUIPMENT. DEBT SERVICE COSTS ARE ESTIMATED FROM CONSTRUCTION, BUS, EQUIPMENT, LAND PURCHASE, INTEREST VARIABLES, AND AMORTIZATION SCHEDULE. (JZ)

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URBAN EDUCATION SYSTEMS ANALYSIS

BY- CLARK, STEPHEN C. AND O BRIEN, RICHARD J. AND CASE, C.
MARSTON

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE, WASHINGTON, D.C.

PUBLISHED- 67

IN- TECHNICAL NOTE, NO. 24

016 PAGES

DESCRIPTORS- *COSTS, *DECISION MAKING, *DEMOGRAPHY, *SYSTEMS
ANALYSIS, *URBAN EDUCATION, ESTIMATED COSTS, SCHOOL DEMOGRAPHY

ANALYSIS OF URBAN EDUCATIONAL SYSTEMS MAY BE ACHIEVED BY USE OF AN ANALYTICAL MODEL. THE MODEL MAY BE USED IN DECISION-MAKING REGARDING SCHOOL LOCATION, ENROLLMENT, FACILITIES, ORGANIZATION, PROGRAMS AND COSTS. KNOWN DATA SUCH AS MONIES AVAILABLE, STAFF ALLOCATION, AND CURRENT SCHOOL PLANT ARE INTRODUCED INTO THE MODEL. IN THE STRUCTURE OF THE MODEL--(1) AN INITIAL INVESTMENT POLICY (BUILDING) IS PROPOSED BY THE ADMINISTRATOR. THE PROPOSAL IS RELATED TO (2) AN URBAN SUBMODEL WHICH COMBINES PUPIL POPULATION, LOCATION, TRANSPORTATION NEEDS, AND SOCIO-ECONOMIC CHARACTERISTICS OF THE COMMUNITY, (3) SCHOOL SUBMODEL WHICH DESCRIBES THE SCHOOL PROGRAM, SITE SPECIFICATIONS AND DEVELOPMENT PLANS, STAFF SPECIFICATIONS, AND SPACE AND EQUIPMENT PROVISIONS PER PUPIL BY INSTRUCTIONAL AREA, AND (4) COST SUBMODEL WHICH HELPS TO ESTIMATE ACCURATELY TOTAL PER PUPIL EXPENDITURE FOR REMODELING EXISTING FACILITIES COMPARED TO NEW SITE AND CONSTRUCTION PROPOSALS, PER PUPIL TRANSPORTATION EXPENDITURES, AND CURRENT OPERATION COSTS. IN AN INTERACTION SUBMODEL (5), SUBMODELS (2), (3), AND (4) ARE SUMMED. SUBMODEL (6) EVALUATES BENEFITS AND COSTS PER PUPIL IN RELATION TO EDUCATIONAL OBJECTIVES, CAUSING EXAMINATION SUBMODEL (7), THROUGH FEEDBACK, TO ALTER THE ORIGINAL PROPOSAL (1), JUSTIFYING, MODIFYING, OR ELIMINATING THE INITIAL INVESTMENT POLICY. (BD)

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PUBLISHED- 67

066 PAGES

DESCRIPTORS- *EDUCATIONAL PARKS, *FEDERAL AID, *SCHOOL PLANNING, *URBAN POPULATION, *URBAN SCHOOLS, DEFACTO SEGRATION, EDUCATIONAL FINANCE, POPULATION DISTRIBUTION, URBAN EDUCATION

MAJOR ADDRESSES CONCERNING EDUCATIONAL FACILITIES IN URBAN SETTINGS, WHICH WERE PRESENTED AT THE 1967 MEETING OF THE COUNCIL OF EDUCATIONAL FACILITY PLANNERS. THE PRESENTATIONS SET FORTH MUCH OF THE CONTEMPORARY THINKING AND PLANNING AS TO HOW EDUCATIONAL FACILITIES CAN BE DEVELOPED TO HELP RESOLVE THE VASTLY COMPLICATED NEGATIVE SITUATION CURRENTLY CHARACTERIZING URBAN ENVIRONMENTS. (FS)//

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FEDERAL AND STATE AID

PER PUPIL COSTS OF NEW SCHOOL BUILDINGS, 1965

PENNSYLVANIA STATE DEPARTMENT OF PUBLIC INSTRUCTION, HARRISBURG

PUBLISHED- 65

003 PAGES

DESCRIPTORS- *COSTS, *EDUCATIONAL FINANCE, CONSTRUCTION COSTS,
ELEMENTARY SCHOOLS, HIGH SCHOOLS, STUDENT COSTS

A TABLE WHICH GIVES PER PUPIL COST STRUCTURE PLUS ARCHITECTS FEE, AND PER PUPIL
COST BASED ON TOTAL COST LESS SITE COST FOR SCHOOLS BUILT IN PENNSYLVANIA IN 1965.

Availability;

Pennsylvania State Department of
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Harrisburg, Pennsylvania

NEW YORK STATE TITLE III NDEA PLANNING GUIDE (REVISED EDITION
1967-68)

STATE UNIVERSITY OF NEW YORK, ALBANY

PUBLISHED- 68

028 PAGES

DESCRIPTORS- *EDUCATIONAL FINANCE, *FEDERAL AID, *FEDERAL
PROGRAMS, *FINANCIAL SUPPORT, *PLANNING, SCHOOL PLANNING

THIS DOCUMENT PROVIDES GUIDELINES FOR PUBLIC SCHOOL
AUTHORITIES WHO WISH TO AVAIL THEMSELVES OF THE OPPORTUNITIES
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PARTICIPATION IN THE PROGRAM IN TERMS OF--APPLICATION PROCEDURES,
REIMBURSEMENT PROCEDURES, SPECIAL PROJECTS, PRIORITY
CONSIDERATIONS, BASIC STANDARDS FOR THE APPROVAL OF PROJECTS, AND
SPECIAL EQUIPMENT AND FURNITURE. (GM)

Availability:

The University of the State of New York
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Albany, New York

FEDERAL ASSISTANCE FOR EDUCATIONAL PLANNING ACQUIRING AND
DEVELOPING SITES AND CONSTRUCTING FACILITIES

BY- GARDNER, DWAYNE E. AND TROTTER, CHARLES E., JR. AND LEVY,
SPERRY D.
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, WASHINGTON, D. C.

044 PAGES

DESCRIPTORS- *EDUCATIONAL FACILITIES, *EDUCATIONAL PLANNING,
*FEDERAL AID, *FEDERAL PROGRAMS, *SITE DEVELOPMENT, *HEALTH
OCCUPATIONS EDUCATION, *HIGHER EDUCATION, *LIBRARY FACILITIES,
*URBAN EDUCATION, *VOCATIONAL SCHOOLS

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PROGRAM--(1)EDUCATIONAL PLANNING, (2)ACQUISITION AND DEVELOPMENT
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PUBLIC SCHOOL BUILDING AID PROGRAM IN CONNECTICUT (A BRIEF HISTORY FROM 1945 TO 1968)

CONNECTICUT STATE DEPARTMENT OF EDUCATION, HARTFORD, BUREAU OF SCHOOL BUILDINGS

PUBLISHED-MAY68

OC3 PAGES

DESCRIPTORS- *EDUCATIONAL FINANCE, *EDUCATIONAL LEGISLATION, *SCHOOL BUILDINGS, *STATE AID, *STATE PROGRAMS, HANDICAPPED, MIDDLE SCHOOLS, REGIONAL SCHOOLS, RETARDATION, SPECIAL EDUCATION, VOCATIONAL EDUCATION

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Availability:

**Connecticut State Department of Educ.
Bureau of School Buildings
Hartford, Connecticut**

STATE PARTICIPATION IN FINANCING LOCAL PUBLIC-SCHOOL FACILITIES

**BY- BARR, W. MONTFORD AND WILKERSON, WILLIAM R.
NATIONAL EDUCATION ASSN., WASHINGTON D.C., COMMITTEE ON
EDUCATIONAL FINANCE**

PUBLISHED- 65

**DESCRIPTORS- *EDUCATIONAL FINANCE, *PUBLIC SCHOOLS, *RESEARCH
METHODOLOGY, *RESEARCH REVIEWS (PUBLICATIONS), *STATE AID,
EDUCATIONAL ADMINISTRATION, EDUCATIONAL TRENDS**

**A REVIEW OF RESEARCH AND PROCEDURES IN STATE PARTICIPATION
IN FINANCING LOCAL CAPITAL OUTLAYS IN THE 25 YEAR PERIOD FROM
1940-1965. THE REPORT SUMMARIZES MAJOR STUDIES PUBLISHED IN 1940,
1951, AND 1959 AND NUMEROUS UNCOORDINATED STUDIES AND REPORTS
SINCE THAT DATE. (FPO)**

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PLAN FOR EXPENDITURE OF STATE CAPITAL OUTLAY FUNDS, 1968-69

TENNESSEE STATE DEPT. OF EDUCATION, NASHVILLE

PUBLISHED- 68

7 PAGES

DESCRIPTORS- *ACCOUNTING, *CAPITAL OUTLAY (FOR FIXED ASSETS),
*EDUCATIONAL FINANCE, *EDUCATIONAL PLANNING, *STATE PROGRAMS,
STATE DEPARTMENTS OF EDUCATION

THE BLANK FORM TO BE FILLED OUT BY A SCHOOL DISTRICT FOR SUBMISSION TO
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Availability:

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WASHINGTON OFF. STATE SUPT. PUB. INSTR., OLYMPIA

PUBLISHED-JAN64

5 PAGES

DESCRIPTORS- *BUILDING PROGRAMS, *EDUCATIONAL FINANCE, *SCHOOL BUILDINGS, *SCHOOL DISTRICTS, *STATE AID, FINANCIAL SUPPORT, STATE PROGRAMS

THE DETERMINATION OF THE PERCENTAGE OF STATE ASSISTANCE TO AID SCHOOL DISTRICTS IN FINANCING SCHOOL BUILDING CONSTRUCTION COMMONLY KNOWN AS THE " STATE MATCHING RATIO " IN THE STATE OF WASHINGTON.

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SCHOOL BUILDING CONSTRUCTION NEEDS 1967-69 BIENNIAL PERIOD

WASHINGTON STATE BOARD OF EDUCATION, OLYMPIA

PUBLISHED-DEC66

23 PAGES

DESCRIPTORS- *CONSTRUCTION NEEDS, *EDUCATIONAL FINANCE,
*SPECIFICATIONS, *STATE DEPARTMENTS OF EDUCATION, *STATE SURVEYS,
SCHOOL BUILDINGS

A SUMMARY OF THE DATA SUBMITTED BY SCHOOL DISTRICTS IN AN ON-THE -PREMISES
SURVEY CONDUCTED BY THE STATE OF WASHINGTON, DEPARTMENT OF EDUCATION
OFFICE STAFF DURING THE SPRING AND SUMMER OF 1966 IN EACH SCHOOL DISTRICT
OF THE STATE WHICH INDICATED A NEED FOR ADDITIONAL FACILITIES BY JULY 1, 1972.

Availability:

Washington State Board of Education
Olympia, Washington

**PROCEDURES TO BE OBSERVED IN ORDER FOR SCHOOL DISTRICTS TO
QUALIFY FOR STATE PUBLIC SCHOOL BUILDING FUNDS**

MISSISSIPPI STATE DEPT OF EDUCATION, JACKSON

PUBLISHED- 65

**A LISTING OF, AND AN ELABORATION ON 21 PROCEDURES WHICH SCHOOL DISTRICTS IN
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Availability:

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Jackson, Mississippi**

THE DEVELOPMENT OF FEDERAL, STATE AND COUNTY FINANCE PROGRAMS FOR KANSAS SCHOOLS

KANSAS STATE DEPT. OF PUBLIC INSTR., TOPEKA

PUBLISHED-MAY62

012 PAGES

DESCRIPTORS- *EDUCATIONAL FINANCE, *FEDERAL AID, *FINANCIAL SUPPORT, *STATE AID, *STATE FEDERAL SUPPORT, EQUALIZATION AID, SCHOOL TAXES, STATE FEDERAL AID, TAX SUPPORT

THIS IS A BRIEF HISTORICAL ACCOUNT OF THE DEVELOPMENT OF FEDERAL, STATE AND COUNTY SCHOOL FINANCE PROGRAMS THAT HAVE BEEN ESTABLISHED IN KANSAS.(FS)

Availability:

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